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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/595,068	06/15/2000	David S. Tait	7125	9142

28574 7590 06/05/2002

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EXAMINER
GREEN, MIGUEL D

ART UNIT	PAPER NUMBER
2681	

DATE MAILED: 06/05/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/595,068	TAIT, DAVID S.	
	Examiner	Art Unit	
	Miguel D. Green	2681	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 February 2002* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-37* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-37* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *05 September 2000* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Information Disclosure Statement

1. The reference(s) submitted by the applicant on February 12, 2002 have been considered. However, PTO Form 1449 was not found by the Examiner to be in the file folder; this form needs to be re-submitted and then signed to indicate consideration of these references.

Response to Arguments

2. Applicant's arguments with respect to claims 1-36 have been considered but are moot in view of the new ground(s) of rejection. Claim 37 is a newly added claim.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-37 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

5. The Examiner fails to see how determining and/or knowing the location of an antenna enables the correct positioning/aiming of the antenna in order to receive signals from a particular direction; the applicant does not convincingly show that driving (i.e., rotating) an antenna to point in a particular direction to receive communication on a selected channel can be based on calculations involving mere location (as determined by GPS or calculated via an affiliated system microprocessor).

6. As disclosed by the applicant, the antenna is mounted in a fixed location, having the ability to be rotated by a motor driving the mast mounting. If, for example, a user is to choose a channel whose transmission source is precisely due South of the antenna mast, would the antenna need to be rotated 180 degrees in order to aim it to receive the transmission? Not necessarily, if the antenna was already pointing in that direction (due South) to begin with. At the same location, the antenna may need to be rotated towards due South by some other amount of degrees, depending on its initial pointing position. Furthermore, the same antenna at an initial location pointing due North would need to be rotated by 180 degrees to capture a signal from the transmission source (which is due South), just as if the antenna was at another location still initially pointing due North and still due North relative to the source but yet in a different location closer to or farther from the source. Knowing or calculating the location of the antenna mast is not equivalent to knowing where the antenna is pointing at any particular time; merely knowing or calculating location (whether of the antenna or of the source) is an insufficient basis for determining how much to rotate an antenna (that is, how to position/aim the antenna) to receive a signal per an individual channel selection, which is read to be the intention of the applicant's claim of a system and method for positioning/aiming an antenna automatically using motor control.

7. Location-based positioning/aiming (i.e., motorized rotation) and computing path movement of the antenna is not enabled in the invention as claimed by the applicant. A GPS receiver, as presently recited by the applicant, can only provide a location of the antenna, as opposed to the more critical dimension of antenna pointing direction where it is aimed that is to be changed, controlled in response to each channel selection.

Prior Art of Record

The following is prior art made of record and not relied upon but considered pertinent to applicant's disclosure:

Sakurai et al (US 4,796,032) discloses a satellite broadcasting receiving system which allows a user to select a channel, the information for which has been previously stored specifically in regards to an associated antenna position, and means for controlling antenna motion in order to position the antenna to view the selected channel broadcast (col.2 line 40 - col.3 line 5, col.4 lines 47-50, and col.8 lines 33-66).

Ma et al (US 4,801,940) discloses a satellite seeking system for TVRO antennas, wherein a search is done to find the optimum channel and polarization angle for signal reception; however, all the available channels are scanned without changing the antenna position for each channel selection (col.7 lines 67-68).

Sklar et al (US 5,760,819) discloses a system and method to control the steering of an antenna disposed on an aircraft and used as for in-flight, in-seat video and audio entertainment. However, since all television channels received are contained within the same data streams, each passenger can select any particular channel without affecting the reception by others (col.4 lines 42-45), and thus, selecting an individual channel does not directly control the positioning of the antenna per each channel selection.

Rossi et al (US 6,239,767) discloses a communications system wherein the movement of a mounted antenna is controlled to keep track of a received signal, using GPS to provide directional information for antenna pointing (col.5 lines 30-38 and 48-55).

Daginnus et al (US 6,317,096) discloses an antenna system with direction selective reception, wherein a GPS unit is used along with a gyromagnetic sensor (i.e., a compass) to generate a control signal in response to a driving direction change, the signal controlling the mechanical rotation of a mounted antenna, so as to keep track of a selected satellite that transmits data, television and radio signals (col.2 lines 24-43).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Miguel D. Green whose telephone number is 703-308-6729. The examiner can normally be reached on Mon-Fri (8:30am - 5pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dwayne D. Bost can be reached on 703-305-4778. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-0377.

MDG
May 24, 2002

NAY MAUNG
PRIMARY EXAMINER